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Electronic Patent Application Submission
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Application ID: 10676887
Title of Invention: Mechanism to Control HW
Interrupt Acknowledgement in a
Virtual Machine System
First Named Inventor: Steven Bennett
Domestic/Foreign Application: Domestic Application
Filing Date: 2003-09-30
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Statement
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TRANSMITTAL

Electronic Version v1.1

Stylesheet Version v1.1.0

| Title of Invention | Mechanism to Control HW Interrupt Acknowledgement in a Virtual Machine System | | | | | | | | | |
|--|--|----------------|---------------------------|-------------|----------------|---|-------------------|------------|--|------------|
| <p>Application Number: 10/676887 </p> <p>Date: 2003-09-30</p> <p>First Named Applicant: Steven Bennett</p> <p>Confirmation Number: 8115</p> <p>Attorney Docket Number: 42P16348</p> | | | | | | | | | | |
| <p>I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.</p> <p>I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.</p> | | | | | | | | | | |
| <table border="1"><thead><tr><th>Submitted by:</th><th>Elec. Sign.</th><th>Sign. Capacity</th></tr></thead><tbody><tr><td>William W. Schaal Registered Number: 39018</td><td>William W. Schaal</td><td>Attorney</td></tr></tbody></table> | | | Submitted by: | Elec. Sign. | Sign. Capacity | William W. Schaal Registered Number: 39018 | William W. Schaal | Attorney | | |
| Submitted by: | Elec. Sign. | Sign. Capacity | | | | | | | | |
| William W. Schaal Registered Number: 39018 | William W. Schaal | Attorney | | | | | | | | |
| <table><tr><td>Documents being submitted</td><td>Files</td></tr><tr><td>us-ids</td><td>42P16348-usidst.xml</td></tr><tr><td></td><td>us-ids.dtd</td></tr><tr><td></td><td>us-ids.xsl</td></tr></table> | | | Documents being submitted | Files | us-ids | 42P16348-usidst.xml | | us-ids.dtd | | us-ids.xsl |
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| | us-ids.xsl | | | | | | | | | |
| Comments | | | | | | | | | | |



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

| Title of Invention | Mechanism to Control HW Interrupt Acknowledgement in a Virtual Machine System |
|-------------------------|---|
| Application Number: | 10/676887 |
| Confirmation Number: | 8115 |
| First Named Applicant: | Steven Bennett |
| Attorney Docket Number: | 42P16348 |
| Art Unit: | Unknown |
| Examiner: | Unknown Unknown |
| Search string: | (20010021969 or 20010027527 or 20010037450 or 20030018892 or 4037214 or 4162536 or 4247905 or 4276594 or 4278837 or 4307447 or 4319323 or 4347565 or 4366537 or 4521852 or 4571672 or 4759064 or 4795893 or 4825052 or 4907270 or 4907272 or 4910774 or 5007082 or 5022077 or 5075842 or 5079737 or 5255379 or 5293424 or 5317705 or 5319760 or 5386552 or 5421006 or 5434999 or 5437033 or 5442645 or 5455909 or 5459867 or 5459869 or 5473692 or 5479509 or 5504922 or 5511217 or 5522075 or 5528231 or 5533126 or 5564040 or 5566323 or 5568552 or 5582717 or 5606617 or 5615263 or 5628022 or 5657445 or 5717903 or 5720609 or 5721222 or 5729760 or 5737604 or 5737760 or 5757919 or 5764969 or 5796835 or 5796845 or 5805712 or 5825875 or 5835594 or 5844986 or 5852717 or 5854913 or 5867577 or 5872994 or 5890189 or 5900606 or 5901225 or 5903752 or 5937063 or 5953502 or 5970147 or 5978481 or 5987557 or 6014745 or 6055637 or 6058478 or 6061794 or 6075938 or 6085296 or 6092095 or 6101584 or 6115816 or 6125430 or 6148379 or 6158546 or 6173417 or 6175925 or 6178509 or 6182089 or 6192455 or 6205550 or 6212635 or 6222923 or 6249872 or 6252650 or 6269392 or 6272533 or 6272637 or 6282651 or 6282657 or 6292874 or 6301646 or 6308270 or 6314409 or 6321314 or 6330670 or 6339815 or 6339816 or 6357004 or 6363485 or 6374286 or 6374317 or 6378068 or 6378072 or 6389537 or 6397242 or 6412035 or 6421702 or 6435416 or |



6445797 or 6463535 or 6463537 or 6499123 or
6505279 or 6507904 or 6535988 or 6557104 or
6633963 or 6633981).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass |
|------|----------|-------------|------------|----------------------------------|------|-------|----------|
| | 1 | 20010021969 | 2001-09-13 | Burger, Stephen G., et al. | | | |
| | 2 | 20010027527 | 2001-10-04 | Khidekel, Yuri , et al. | | | |
| | 3 | 20010037450 | 2001-11-01 | Metlitski, Evgueny A., et al. | | | |
| | 4 | 20030018892 | 2003-01-23 | Tello, Jose | | | |
| | 5 | 4037214 | 1997-07-09 | Birney, Richard E., et al. | | | |
| | 6 | 4162536 | 1979-07-24 | Morley, Richard E. | | | |
| | 7 | 4247905 | 1981-01-27 | Yoshida, Yukihiro , et al. | | 711 | 166 |
| | 8 | 4276594 | 1981-06-30 | Morley, Richard E. | | | |
| | 9 | 4278837 | 1981-07-14 | Best, Robert M. | | | |
| | 10 | 4307447 | 1981-12-22 | Provanzano, Salvatore R., et al. | | | |
| | 11 | 4319323 | 1982-03-09 | Ermolovich, Thomas R., et al. | | | |
| | 12 | 4347565 | 1982-08-31 | Kaneda, Saburo , et al. | | | |
| | 13 | 4366537 | 1982-12-28 | Andrew, R. H., et al. | | | |
| | 14 | 4521852 | 1985-06-04 | Guttag, Karl M. | | | |
| | 15 | 4571672 | 1986-02-18 | Hatada, Minoru , et al. | | | |
| | 16 | 4759064 | 1988-07-19 | Chaum, | | | |
| | 17 | 4795893 | 1989-01-03 | Ugon, Michael | | | |
| | 18 | 4825052 | 1989-04-25 | Chemin, Francois , et al. | | | |
| | 19 | 4907270 | 1990-03-06 | Hazard, Michel | | | |
| | 20 | 4907272 | 1990-03-06 | Hazard, Michel | | | |
| | 21 | 4910774 | 1990-03-20 | Barakat, Simon | | | |
| | 22 | 5007082 | 1991-04-09 | Cummins, Mary T. | | | |
| | 23 | 5022077 | 1991-06-04 | Bealkowski, Richard , et al. | | | |
| | 24 | 5075842 | 1991-12-24 | Lai, Konrad K. | | | |
| | 25 | 5079737 | 1992-01-07 | Hackbarth, Holden G. | | 711 | 164 |
| | 26 | 5255379 | 1994-03-08 | Melo, Michael D. | | | |
| | 27 | 5293424 | 1994-03-08 | Hotley, Thomas O., et al. | | | |
| | 28 | 5317705 | 1994-05-31 | Gannon, Patrick M., et al. | | | |
| | 29 | 5319760 | 1994-06-07 | Mason, Andrew H., et al. | | | |

| | | | | |
|--|----|---------|------------|---------------------------------|
| | 30 | 5386552 | 1995-01-31 | Garney, John L. |
| | 31 | 5421006 | 1995-05-30 | Jablon, David P., et al. |
| | 32 | 5434999 | 1995-07-18 | Goire, Christian , et al. |
| | 33 | 5437033 | 1995-07-25 | Inoue, Taro , et al. |
| | 34 | 5442645 | 1995-08-15 | Ugon, Michel , et al. |
| | 35 | 5455909 | 1995-10-03 | Blomgren, James S., et al. |
| | 36 | 5459867 | 1995-10-17 | Adams, Phillip M., et al. |
| | 37 | 5459869 | 1995-10-17 | Spilo, Michael L. |
| | 38 | 5473692 | 1995-12-05 | Davis, Derek L. |
| | 39 | 5479509 | 1995-12-26 | Ugon, Michael |
| | 40 | 5504922 | 1996-04-02 | Seki, Yukihiro , et al. |
| | 41 | 5511217 | 1996-04-23 | Nakajima, Atsushi , et al. |
| | 42 | 5522075 | 1996-05-28 | Robinson, Paul T., et al. |
| | 43 | 5528231 | 1996-06-18 | Patarin, Jacques |
| | 44 | 5533126 | 1996-07-02 | Hazard, Michel , et al. |
| | 45 | 5564040 | 1996-10-08 | Kubals, Jeffrey P. |
| | 46 | 5566323 | 1996-10-15 | Ugon, Michel |
| | 47 | 5568552 | 1996-10-22 | Davis, Derek L. |
| | 48 | 5582717 | 1996-12-10 | Di Santo, Dennis E. |
| | 49 | 5606617 | 1997-02-25 | Brands, Stefanus A. |
| | 50 | 5615263 | 1997-03-25 | Takahashi, Richard J. |
| | 51 | 5628022 | 1997-05-06 | Ueno, Masahiro , et al. |
| | 52 | 5657445 | 1997-08-12 | Pearce, John J. |
| | 53 | 5717903 | 1998-02-10 | Bonola, Thomas J. |
| | 54 | 5720609 | 1998-02-24 | Pfefferle, William C. |
| | 55 | 5721222 | 1998-02-24 | Bernstein, Peter R., et al. |
| | 56 | 5729760 | 1998-03-17 | Poisner, David I. |
| | 57 | 5737604 | 1998-04-07 | Miller, David A., et al. |
| | 58 | 5737760 | 1998-08-07 | Grimmer, Jr., George G., et al. |
| | 59 | 5757919 | 1998-05-26 | Herbert, Howard C., et al. |
| | 60 | 5764969 | 1998-06-09 | Kahle, James A. |
| | 61 | 5796835 | 1998-08-18 | Saada, Charles |
| | 62 | 5796845 | 1998-08-18 | Serikawa, Mitsuhiro , et al. |
| | 63 | 5805712 | 1998-09-08 | Davis, Derek L. |
| | 64 | 5825875 | 1998-10-20 | Ugon, Michel |
| | 65 | 5835594 | 1998-11-10 | Albrecht, Mark , et al. |

711

163

| | | | |
|-----|---------|------------|----------------------------------|
| 66 | 5844986 | 1998-12-01 | Davis, Derek L. |
| 67 | 5852717 | 1998-12-22 | Bhide, Chandrashekhar W., et al. |
| 68 | 5854913 | 1998-12-29 | Goetz, John W., et al. |
| 69 | 5867577 | 1999-02-02 | Patarin, Jacques |
| 70 | 5872994 | 1999-02-16 | Akiyama, Shin-Ichiro , et al. |
| 71 | 5890189 | 1999-03-30 | Nozue, Hiroshi , et al. |
| 72 | 5900606 | 1999-05-04 | Rigal, Vincent |
| 73 | 5901225 | 1999-05-04 | Ireton, Mark A., et al. |
| 74 | 5903752 | 1999-05-11 | Dingwall, Thomas J., et al. |
| 75 | 5937063 | 1999-08-10 | Davis, Derek L. |
| 76 | 5953502 | 1999-09-14 | Helbig, Sr., Walter A. |
| 77 | 5970147 | 1999-10-19 | Davis, Derek L., et al. |
| 78 | 5978481 | 1999-11-02 | Ganesan, Ramanan V., et al. |
| 79 | 5987557 | 1999-11-16 | Ebrahim, Zahir |
| 80 | 6014745 | 2000-01-11 | Ashe, Vincent |
| 81 | 6055637 | 2000-04-25 | Hudson, Jerome D., et al. |
| 82 | 6058478 | 2000-05-02 | Davis, Derek L. |
| 83 | 6061794 | 2000-05-09 | Angelo, Michael E. |
| 84 | 6075938 | 2000-06-13 | Bugnion, Edouard , et al. |
| 85 | 6085296 | 2000-07-04 | Karkhanis, Nitin Y., et al. |
| 86 | 6092095 | 2000-07-18 | Maytal, Benjamin |
| 87 | 6101584 | 2000-08-08 | Satou, Mitsugu , et al. |
| 88 | 6115816 | 2000-09-05 | Davis, Derek L. |
| 89 | 6125430 | 2000-09-26 | Noel, Karen L., et al. |
| 90 | 6148379 | 2000-11-14 | Schimmel, Curt F. |
| 91 | 6158546 | 2000-12-12 | Hanson, Roger D., et al. |
| 92 | 6173417 | 2001-01-09 | Merrill, John W. |
| 93 | 6175925 | 2001-01-16 | Nardone, Joseph M., et al. |
| 94 | 6178509 | 2001-01-23 | Nardone, Joseph M. |
| 95 | 6182089 | 2001-01-30 | Ganapathy, Narayanan , et al. |
| 96 | 6192455 | 2001-02-20 | Bogin, Zohar , et al. |
| 97 | 6205550 | 2001-03-20 | Nardone, Joseph M., et al. |
| 98 | 6212635 | 2001-04-03 | Reardon, David C. |
| 99 | 6222923 | 2001-04-24 | Schwenk, Joerg |
| 100 | 6249872 | 2001-06-19 | Wildgrube, Frank L., et al. |
| 101 | 6252650 | 2001-06-26 | Nakaumra, Kouji |
| | | | |

| | | | | |
|--|-----|---------|------------|-------------------------------|
| | 102 | 6269392 | 2001-07-31 | Cotichini, Christian , et al. |
| | 103 | 6272533 | 2001-08-07 | Browne, Hendrik A., et al. |
| | 104 | 6272637 | 2001-08-07 | Little, Wendell L., et al. |
| | 105 | 6282651 | 2001-08-28 | Ashe, Vincent |
| | 106 | 6282657 | 2001-08-28 | Kaplan, Michael M., et al. |
| | 107 | 6292874 | 2001-09-18 | Barnett, Philip C. |
| | 108 | 6301646 | 2001-10-09 | Hostetter, Matthew J. |
| | 109 | 6308270 | 2001-10-23 | Guthery, Scott B., et al. |
| | 110 | 6314409 | 2001-11-06 | Schneck, Paul B., et al. |
| | 111 | 6321314 | 2001-11-20 | Van Dyke, Korbin S. |
| | 112 | 6330670 | 2001-12-11 | England, Paul , et al. |
| | 113 | 6339815 | 2002-01-15 | Feng, Eugene |
| | 114 | 6339816 | 2002-01-12 | Bausch, Jean |
| | 115 | 6357004 | 2002-03-12 | Davis, Derek L. |
| | 116 | 6363485 | 2002-03-26 | Adams, Carlisle |
| | 117 | 6374286 | 2002-04-16 | Gee, John K., et al. |
| | 118 | 6374317 | 2002-04-16 | Ajanovic, Jasmin , et al. |
| | 119 | 6378068 | 2002-04-23 | Foster, Mark J. |
| | 120 | 6378072 | 2002-04-23 | Collins, Thomas , et al. |
| | 121 | 6389537 | 2002-05-14 | Davis, Derek L., et al. |
| | 122 | 6397242 | 2002-05-28 | Devine, Scott W., et al. |
| | 123 | 6412035 | 2002-06-25 | Webber, Victor |
| | 124 | 6421702 | 2002-07-16 | Gulick, Dale E. |
| | 125 | 6435416 | 2002-08-20 | Slassi, Tarik |
| | 126 | 6445797 | 2002-09-03 | McGough, Paul , et al. |
| | 127 | 6463535 | 2002-10-08 | Drews, Paul C., et al. |
| | 128 | 6463537 | 2002-10-08 | Tello, Jose A. |
| | 129 | 6499123 | 2002-12-24 | McFarlane, Harold L., et al. |
| | 130 | 6505279 | 2003-01-07 | Phillips, Gary , et al. |
| | 131 | 6507904 | 2003-01-14 | Ellison, Carl M., et al. |
| | 132 | 6535988 | 2003-03-18 | Poisner, David L. |
| | 133 | 6557104 | 2003-04-29 | Vu, Son T., et al. |
| | 134 | 6633963 | 2003-10-14 | Ellison, Carl M., et al. |
| | 135 | 6633981 | 2003-10-14 | Davis, Derek L. |

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| 709 | 213 |
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| 710 | 105 |
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Remarks

Note: Remarks are not for responding to an office action.

Applicants, in accordance with their duty of disclosure under 37 CFR 1.56 and in accordance with 37 CFR 1.97(b)(3), hereby submit this Electronic Information Disclosure Statement citing U.S. Patent Documents for consideration by the Examiner. Pursuant to 37 CFR 1.97, the submission of this Electronic Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability. This Electronic Information Disclosure Statement is being filed prior to a substantive examination of the claims. Pursuant to 37 CFR 1.97(b), no fee should be required for the filing of this Electronic Information Disclosure Statement. In the event it is determined that a fee is due, please charge the fee to Deposit Account 02-2666. Applicants respectfully request that the cited documents be considered and that the form be initialed by the Examiner to indicate such consideration and a copy thereof be returned to Applicants' attorney of record.

Signature

| | |
|---------------|------|
| Examiner Name | Date |
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